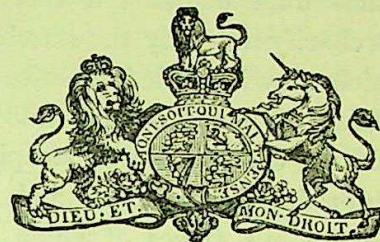


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1871

~~100~~  
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Machine

~~Starch~~  
Sorghum

RECORDED

A.D. 1871, 7th AUGUST. N° 2082.

## Beer.

LETTERS PATENT to John Henry Johnson, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for the Invention of "IMPROVEMENTS IN THE MANUFACTURE OF BEER."—A communication from abroad by Eugène Leconte, of Paris, France.

Sealed the 20th October 1871, and dated the 7th August 1871.

PROVISIONAL SPECIFICATION left by the said John Henry Johnson at the Office of the Commissioners of Patents, with his Petition, on the 7th August 1871.

I, JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN THE MANUFACTURE OF BEER," a communication from abroad by Eugène Leconte, of Paris, France, to be as follows:—

This Invention relates to the employment in the process of brewing 10 of the starch of maize and rice either in the form of powder or otherwise.

*Johnson's Improvements in the Manufacture of Beer.*

It is well known that malt contains a considerable quantity of diastase sufficient to saccharify not only the starch of the barley itself, but any other starch which may be added thereto. The result is that the conversion of the starch of maize or rice into dextrine and sugar is effected by the malt during the process of steeping in the operation 5 of brewing. The starch produced from maize and rice being very pure and free from empyreumatic oils, traces of which are found in potato starch, will be found very much more valuable than this latter in the process of brewing, as it is more easily worked and does not contain the same proportion of oils or other foreign matters, and therefore con- 10 stitutes the best substitute for malt in the process of brewing.

The starch of wheat and other cereals may also be employed for the production of beer, although the Inventor prefers to employ the starch of maize and rice for that purpose.

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SPECIFICATION in pursuance of the conditions of the Letters Patent, 15 filed by the said John Henry Johnson in the Great Seal Patent Office on the 7th February 1872.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, send greeting. 20

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Seventh day of August, in the year of our Lord One thousand eight hundred and seventy-one, in the 35th year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said John Henry Johnson, Her special 25 license that I, the said John Henry Johnson, my executors, administrators, and assigns, or such others as I, the said John Henry Johnson, my executors, administrators, or assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might 30 make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN THE MANUFACTURE OF BEER," a communication to me from abroad by Eugene Leconte, of Paris, France, upon the condition (amongst others) that I, the said John Henry Johnson, by an 35

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instrument in writing under my hand and seal, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and 5 immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said John Henry Johnson, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, that is to say:—

10 The said Invention consists in the application to the manufacture of beer of the starch of maize and rice, the mode of employing which I will now proceed to explain.

It is well known that malt or germinating barley contains a considerable quantity of diastase sufficient to saccharify not only the 15 starch of the barley but also any foreign starch which may be added to it. The result of this is that the conversion into dextrine and sugar of the starch of maize and rice is effected naturally during the operation of steeping under the influence of the malted barley, which constitutes the base in the manufacture of beer. The starch of maize 20 and rice being very pure and free from the empyreumatic oils found in the fecula of potatoes is of the greatest service in the operation of brewing, it is also more easily employed than the said fecula, and does not contain the considerable proportion of oils and other foreign matters which these latter contain, and consequently it forms the best 25 substitute for malt that can be employed in brewing.

I would remark that the starch of wheat and other cereals presents the same external appearance as that of maize and rice and may be substituted for the starch of these latter in the manufacture of beer.

Having now described and particularly ascertained the nature of the 30 said Invention, and the manner in which the same is or may be used or carried into effect, I would observe in conclusion that what I consider to be novel and original, and therefore claim as the Invention secured to me by the herein-before in part recited Letters Patent is,—

The application and use of the starch of maize, rice, wheat, and other 35 cereals, either in the form of powder or in any other form, to and in the manufacture of beer, where they are converted into dextrine and

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*Johnson's Improvements in the Manufacture of Beer.*

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sugar under the action of the diastase of malted barley, as herein-before described.

In witness whereof, I, the said John Henry Johnson, have to this my Specification set my hand and seal, the Seventh day of February One thousand eight hundred and seventy-two. 5

J. HENRY JOHNSON. (L.S.)

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LONDON:

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